UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 March 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,5-8,10-15 and 21-24</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5-8,10-15 and 21-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 March 2009 has been entered.

Response to Arguments

On pages 14-15 of the Applicant's Response, Applicant argues that Brodsky does not teach "wherein the received supplemental data relates to one or more key phrases of a closed captioning script."

The Examiner respectfully disagrees with Applicant's arguments because Brodsky teaches of a system in which users watching television program can retrieve supplemental information pertaining to a word or group of words just heard. The system creates a dynamically changing dictionary to store items or keywords extracted from the closed caption text. For instance, when a person in a television show mentions a key phrase, the user can call up a menu of recently stored keywords or phrases and request additional information related to that keyword or phrase (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 5 lines 36-63, Col. 6 lines 12-42). Therefore, Brodsky meets the limitation "wherein the received supplemental data relates to one or more key phrases of a closed captioning script."

On pages 16-18 of the Applicant's Response, Applicant argues that Brodsky fails

to disclose that the association of "supplemental data with at least one key phrase of a

closed captioning script" is automatic.

The Examiner respectfully disagrees with Applicant's arguments because

Brodsky teaches a system that uses a dictionary that is dynamically changing and

continuously updated which is created in real-time without user interaction. The entries

within the dictionary are extracted from the most recently received portion of the

program (i.e. closed-caption) (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 3 line 52-Col. 4

line 3, Col. 5 lines 36-63, Col. 6 lines 12-42). Therefore, Brodsky meets the limitation

since the system automatically creates the dictionary which associates key phrases in

the closed-caption text to supplemental data.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention

falls outside of the statutory categories. While claims **21-24** define a "process", or

"method", intrinsic evidence within the specification suggests that the method is drawn

to steps performed purely by software (see paragraph **[0041]** of the specification, i.e.

the claim recites "a key phrase module", however the specification notes that the parser

(60) is implemented as a computer software program) and software per se. is neither a

"product" nor a "process" in a statutory sense. That is, software is not a physical thing

and therefore not a product, and software is not a series of steps per se., and therefore

not a "process". The aforementioned intrinsic evidence in the specification suggests

that the full scope of the claimed method encompasses nothing more than software and

is therefore non-statutory for that reason. ("Therefore if the examiner determines that it

is more likely than not that the claimed subject matter falls outside of all statutory

categories, the examiner must provide an explanation." Guidelines Section IV.B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yen et al. (US Pat. **6,668,278**), in view of Hidary et al. (US Pat. **5,774,644**), and in

further view of Brodsky (US Pat. **5,809,471**), herein referenced as Yen, Hidary, and

Brodsky, respectively.

Regarding **claim 1**, Yen discloses "a viewer computing unit (information receiver

110) having a processor, a program enhancement listener implemented as computer

executable instructions stored on a computer-readable medium and executable on the

processor (Col. 4 lines 26-35, Fig. 1) to direct the viewer computing unit to: receive

supplemental data ..., wherein the received supplemental data relates to ... a closed

captioning script" (Col. 3 lines 16-34, Col. 4 line 65-Col. 5 line 7, Col. 5 lines 40-50, Col.

8 lines 34-49, Col. 11 lines 20-31, i.e. Yen teaches of a system that receives

supplemental content, such as web links, provided in the closed-captioning script).

"initiating an enhancement action based upon the supplemental data to enhance

the program as the video program is being played, wherein the enhancement action is

performed without user interaction" (Col. 9 lines 33-50, Col. 11 lines 20-31, lines 42-57).

Yen fails to explicitly disclose "[receiving] supplemental data sent to a multicast

address, wherein the received supplemental data relates to one or more key phrases of

a closed captioning script".

Hidary teaches "[receiving] supplemental data sent to a multicast address" (Col.

7 lines 20-40, i.e. Hidary teaches that URL's are sent to a user's PC via multicasting

connection). Thus, it would have been obvious to one of ordinary skill in the art to apply

the technique of sending supplemental data to multicast address as taught by Hidary, to

improve the information retrieval system of Yen for the predictable result of effectively

sending a single supplemental data to a select group of people.

The combination of Yen and Hidary still fails to explicitly disclose that "the

received supplemental data relates to one or more key phrases of a closed captioning

script of a video program".

Brodsky discloses that "the received supplemental data relates to one or more

key phrases of a closed captioning script of a video program" (Col. 1 lines 50-62, Col. 2

lines 20-41, Col. 5 lines 36-63, Col. 6 lines 12-42, i.e. Brodsky teaches that keywords

are extracted from the closed-captioning to develop a dictionary of keywords that can be

used to request additional information). Thus, it would have been obvious to one of

ordinary skill in the art to apply the technique of receiving supplemental data that relates

to one or more key phrases of a closed captioning script as taught by Brodsky, to

improve the information retrieval system of Yen for the predictable result of enabling the

user to retrieve supplemental information pertaining to a word or group of words just

heard (Col. 3 lines 52-60).

Regarding **claim 2**, Yen discloses that "the enhancement action comprises

activation of a hyperlink" (Col. 3 lines 16-34, Col. 5 lines 40-50, Col. 11 lines 20-32).

Regarding **claim 3**, Yen discloses that "the enhancement action comprises

launching executable code" (Col. 3 lines 16-34, Col. 5 lines 40-50, Col. 11 lines 20-32,

i.e. Yen teaches of activating a hyperlink to a website, which reads on "launching

executable code").

Regarding **claim 5**, Yen discloses that "computer-executable instructions to

direct the viewer computing unit to display the supplemental data concurrently with the

primary content" (Col. 9 lines 27-50, Col. 11 lines 20-32, lines 42-57, i.e. the

background and foreground elements determine if information items can or should be

displayed simultaneously).

Regarding **claim 6**, Yen fails to explicitly "[presenting] the video program within a

hypermedia document; and controlling placement of the video program within the

hypermedia document using the supplemental data".

Hidary discloses "[presenting] the video program within a hypermedia document;

and controlling placement of the video program within the hypermedia document using

the supplemental data" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that

allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of presenting a video program within a hypermedia document and controlling placement of the video program within the hypermedia document using the supplemental data as taught by Hidary, to improve the information retrieval system of Yen for the predictable result of providing the user with a more interactive experience while watching television by providing them with additional information corresponding to the program.

Regarding **claim 7**, Yen discloses "a viewer computing unit having a processor and a display" (Col. 4 lines 26-35, Fig. 1).

Yen fails to explicitly disclose "a hypermedia document stored on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener".

Hidary discloses "a hypermedia document stored on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of storing a hypermedia document on computer-readable medium and executable on the processor for graphical rendering on the display, the hypermedia document containing the program enhancement listener as taught by Hidary, to improve

the information retrieval system of Yen for the predictable result of providing the user

with a more interactive experience while watching television by providing them with

additional information corresponding to the program.

Claims 8, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hidary et al. (US Pat. **5,774,644**), in view of Brodsky (US Pat. **5,809,471**), and in further

view of Yen et al. (US Pat. **6,668,278**).

Regarding **claim 8**, Hidary discloses "determining an insertion point for the

supplemental content; sending the supplemental data to a device having a multicast

address; receiving, by the device having the multicast address, supplemental data;

initiating, at the determined insertion point, an enhancement action based upon the

received supplemental data to enhance a video program as the video program is being

played" (Col. 7 lines 10-40, Col. 7 line 65-Col. 8 line 4, i.e. Hidary teaches of URL's that

are transmitting via a multicasting connection. The web pages referenced by the URL's

are time stamped to be displayed when predetermined related video content is

displayed).

Hidary fails to explicitly disclose "automatically associating supplemental data

with at least one key phrase of a closed captioning script by parsing the closed

captioning script and; wherein the enhancement action is initiated without user

interaction".

Brodsky discloses "automatically associating supplemental data with at least one key phrase of a closed captioning script by parsing the closed captioning script" (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 4 lines 4-17, Col. 5 lines 36-63, Col. 6 lines 12-42, i.e. Brodsky teaches that keywords are extracted from the closed-captioning to develop a dictionary of keywords that can be used to request additional information. The system automatically creates the dynamically changing dictionary that associates supplemental data with the key phrases). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of receiving supplemental data that relates to one or more key phrases of a closed captioning script as taught by Brodsky, to improve the enhanced video programming system of Hidary for the predictable result of enabling the user to retrieve supplemental information pertaining to a word or group of words just heard (Col. 3 lines 52-60).

The combination of Hidary and Brodsky still fail to explicitly disclose that "the enhancement action is initiated without user interaction".

Yen discloses that "the enhancement action is initiated without user interaction" (Col. 11 lines 42-57, i.e. Yen teaches that the foreground element can immediately begin displaying the information item). Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of initiating an enhancement action without user interaction as taught by Yen, to improve the enhanced video programming system of Hidary for the predictable result of providing the viewer with the convenience of automatically displaying the supplemental information.

Regarding **claim 10**, Hidary discloses that "the supplemental data comprises a hyperlink to a target resource, and the initiating comprises activating the hyperlink to the target resource" (Col. 7 lines 20-30).

Regarding **claim 11**, Hidary discloses that "the supplemental data comprises executable code, and the initiating comprises launching the executable code" (Col. 7 lines 20-25, lines 54-60).

Regarding **claim 12**, Hidary discloses "displaying the supplemental data concurrently with the primary content" (Col. 7 lines 20-30, Col. 7 lines 65-Col. 8 line 4).

Regarding **claim 13**, Hidary discloses "presenting the video program within a hypermedia document; and controlling placement of the video program within the hypermedia document using the supplemental data" (Col. 7 lines 10-29, i.e. teaches of a JAVA enabled browser that allows a computer to retrieve web pages from a video program. The retrieved web pages are then synchronized with the video content).

Regarding **claim 14**, claim 14 is interpreted and thus rejected for the reasons set forth above in the rejection of claim 8. Claim 8 describes a method of receiving supplemental content and initiating an enhancement action and claim 14 describes a computer to perform the method (Hiddary: Col 5, Lines 7-8). Thus, claim 14 is rejected.

Regarding **claim 15**, claim 15 is interpreted and thus rejected for the reasons set forth above in the rejection of claim 8. Claim 8 describes a method of receiving supplemental content and initiating an enhancement action and claim 15 describes computer-executable instruction for performing the step of the method (Hiddary: Col 7, Lines 11-14). Thus, claim 15 is rejected.

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hidary in view of Brodsky, Yen, and in further view of Chen et al. (US Pat. 5,745,602),

herein referenced as Chen.

Regarding claim 21, Hidary discloses "[multicasting] an enhancement action to a

multicast address and a program enhancement listener configured to listen to the

multicast address for the enhancement action an initiate an enhancement action based

upon the supplemental data to enhance a video program as the video program is being

played, and wherein the initiating is synchronized with the video based on the

association of the supplemental..." (Col. 1 line 65-Col. 2 line 12, Col. 7 lines 10-40, Col.

7 line 65-Col. 8 line 4).

Hidary fails to explicitly disclose "a key phrase module configured to: parse a

closed captioning script to identify one or more key phrases in a ...script, wherein each

identified key phrases has the same number of words, the parsing comprising

determining a minimum number of words from the closed captioning script required to

create unique phrases by iteratively selecting different word lengths and checking for

duplication among the resulting created phrases..., wherein the initiating the

enhancement action is performed with requiring user interaction, and...association of

the supplemental data to one or more key phrases identified from the closed captioning

script."

Brodsky discloses "a key phrase module configured to: associate the

supplemental data to one or more key phrases identified from the closed captioning

script" (Col. 1 lines 50-62, Col. 2 lines 20-41, Col. 4 lines 4-17, Col. 5 lines 36-63, Col. 6

lines 12-42, i.e. Brodsky teaches that keywords are extracted from the closed-

captioning to develop a dictionary of keywords that can be used to request additional

information). Thus, it would have been obvious to one of ordinary skill in the art to apply

the technique of receiving supplemental data that relates to one or more key phrases of

a closed captioning script as taught by Brodsky, to improve the enhanced video

programming system of Hidary for the predictable result of enabling the user to retrieve

supplemental information pertaining to a word or group of words just heard (Col. 3 lines

52-60).

The combination of Hidary and Brodsky fail to explicitly disclose that "the

initiating the enhancement action is performed with requiring user interaction".

Yen discloses that "the initiating the enhancement action is performed without

requiring user interaction" (Col. 11 lines 42-57, i.e. Yen teaches that the foreground

element can immediately begin displaying the information item). Thus, it would have

been obvious to one of ordinary skill in the art to apply the technique of initiating an

enhancement action without user interaction as taught by Yen, to improve the enhanced

video programming system of Hidary for the predictable result of providing the viewer

with the convenience of automatically displaying the supplemental information.

The combination still fails to disclose "pars[ing] a ...script to identify one or more

key phrases in a ...script, wherein each identified key phrases has the same number of

words, the parsing comprising determining a minimum number of words from the

...script required to create unique phrases by iteratively selecting different word lengths

and checking for duplication among the resulting created phrases..."

Chen teaches "pars[ing] a ...script to identify one or more key phrases in a

...script, wherein each identified key phrases has the same number of words (Col. 1

lines 6-10, Col. 3 lines 3-25, i.e. Chen discloses a system to automatically identify key

phrases from a machine readable document. Initially, processor (11) selects phrases of

two words to generate a list of phrases. Thus, each identified key phrases has the same

number of words), the parsing comprising determining a minimum number of words

from the … script required to create unique phrases by iteratively selecting different

word lengths and checking for duplication among the resulting created phrases..." (Col.

4 lines 40-54, Col. 5 lines 20-30, Col. 6 lines 31-60, i.e. Chen teaches creating unique

key phrases by sequentially checking different phrase lengths to determine if the phrase

is unique. If it is determined that the phrase is a subphrase/duplicate then it will be

removed from the key phrase list).

Thus, it would have been obvious to one of ordinary skill in the art to apply the

technique of parsing a script to identify a key phrase by iteratively selecting different

word lengths and checking for duplication as taught by Chen, to improve the enhanced

video programming system of Hidary for the predictable result of detecting key phrases

dependent upon neither natural language processing nor corpus-dependent information

(Col. 1 lines 39-45).

Regarding **claim 22**, Hidary discloses "that the program enhancement listener

comprises a control embedded in a container" (Col. 7 lines 10-30, i.e. Merriam-

Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web, which reads on claimed "control embedded in a container").

Regarding **claim 23**, Hidary discloses that "the program enhancement listener comprises a control embedded in an HTML page" (Col. 7 lines 10-30, i.e. Merriam-Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web).

Regarding **claim 24**, Hidary discloses that "the program enhancement listener comprises a control embedded in an application" (Col. 7 lines 10-30, i.e. Merriam-Webster's Dictionary defines the word "embed" as to make something an integral part of. Therefore, the Java enabled browser 98 is an essential part of the client software 106, so that the receiving terminal can access the supplemental content on the web).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Q. Huerta whose telephone number is (571) 270-3582. The examiner can normally be reached on M-F(Alternate Fridays Off) 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Q Huerta
Examiner
Art Unit 2427

June 4, 2009

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2427